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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/803,943      | 03/13/2001  | Henry Haverinen      | P 276745            | 9063             |

909 7590 02/27/2006

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| EXAMINER |
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PHAM, BRENDA H

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| ART UNIT | PAPER NUMBER |
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2664

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/803,943

Applicant(s)

HAVERINEN, HENRY

Examiner

Brenda Pham

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3-9 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1,5,7-9 and 13-15 is/are rejected.
- 7) ☒ Claim(s) 3,4,6,11 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

BRENDA PHAM  
PRIMARY EXAMINER

Attachment(s)

*Brenda H. Pham*

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/29/2005.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 1, 3-9, 11-15 are pending in this application.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 5, 7-9, 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over WARRIER et al (US 6,707,809 B1) in view of LEUNG (US 6,195,705 B1).

Regarding claims 1, 5, 9, 14 and 15, WARRIER et al discloses a telecommunication system, a telecommunication device and method for balancing load in a telecommunications system supporting Mobile IP, the system including at least one primary home agent configured to support mobility of at least one mobile node, the method comprising (referring to figure 2-4): adding one or more secondary home agents (Home Agent 18) to the telecommunications system, in addition to the at least one primary home agent (Home Agent Control Node 36); and processing, in the primary home agent, registration requests, sent from the at least one mobile node or a foreign agent serving the mobile node in a visited network (column 4, lines 7-27); sending a

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routing request to the one or more secondary home agents to transmit packets destined for the at least one mobile node in response to receiving a registration request that is acceptable from the mobile node or from the foreign agent serving the mobile node in the visited network; and intercepting and tunneling packets destined for the at least one mobile node by the one or more secondary home agent in response to the routing request (column 6 and 7, lines 29-67, 1-6, respectively.)

WARRIER et al does not teach primary home agent capable of intercepting and tunneling packets.

LEUNG in the same field of invention, teach a primary home agent configured to support mobility of at least one mobile node and capable of intercepting and tunneling packets (see figure 2, figure 4, step 405, 407 and 415 and column 7, lines 18-36).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to implement the primary home agent 36 of WARRIER et al having the capability of intercepting and tunneling packets, such as that teach by LEUNG, so that each of the home agents is configured with the ability to tunneling packets.

Claims 7, 8 and 13, as explained in the rejection statement of claims 1 and 9 (parent claims), WARRIER et al discloses all the claim limitations as recite in parent claims. Although WARRIER et al fails to teach sending a stop forwarding request to the one or more secondary home agents if a mobility binding to the at

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least one mobile node is released or a registration lifetime of the mobile node expires, it would have been obvious to those having ordinary skill in the art to implement this limitation in WARRIER et al in view of LEUNG. WARRIER et al, the Home Agent Control Node (36) function to maintain the mobility binding record (MBR) in the database which a registration lifetime of the mobile node expires.

Therefore, it would have been obvious to those having ordinary skill in the art at the time of the invention was made to implement the step of generating a control message include a registration lifetime of the mobile node expires to command the secondary home agent to stop the packet transmission to the mobile station.

#### **Allowable Subject Matter**

4. Claims 3, 4, 6, 11-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: the prior art made of record fails to teach or fairly suggests in combination updating Address Resolution Protocol and tunneling configuration of one or more secondary home agents supporting IPv4 protocol, or neighbor discovery configurations and tunneling configuration of the one or more secondary home agents supporting IPv6 protocol, and intercepting and tunneling the packets destined for the at least one mobile node using the updated Address

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Resolution Protocol and tunneling configuration or the neighbor discovery and tunneling configuration.

The prior art fails to teach or fairly suggests in combination the step of transmitting packets destined for the at least one mobile node via the primary home agent in response to receiving an acceptable registration request from the at least one mobile node or a foreign agent serving the mobile node in the visited network; sending a routing request to the one or more secondary home agents to transmit the packets destined for the at least one mobile node; intercepting and tunneling the packets destined for the at least one mobile node using the one or more secondary home agents in response to the routing request; and stopping packet transmission to the at least one mobile node via the primary home agent.

The prior art fails to teach in combination the step of collecting loading information by monitoring a number of packets transmitted by the primary home agent; and transmitting packets destined for the at least one mobile node via the one or more secondary home agents to balance the load in response to a number of transmitted packets being transmitted by the primary home agent exceeding a predetermined threshold value.

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**Conclusion**

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

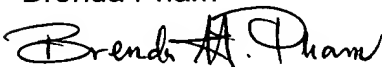
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Pham whose telephone number is (571) 272-3135. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham, can be reached on (571) 272-3179.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

February 16, 2006

Brenda Pham



**BRENDA PHAM**  
**PRIMARY EXAMINER**